

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandra, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,655	09/20/2000	Mark E. Bloomfield	8798.00 5484	
7590 02/12/2004			EXAMINER	
Michael Chan			CHANG, JON CARLTON	
NCR Corporati			ART UNIT	PAPER NUMBER
101 West Schantz, ECD-2 Dayton, OH 45479-0001			<u> </u>	TATER NUMBER
Dayton, OH	1 54/9 - 0001		2623 DATE MAILED: 02/12/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
055	09/666,655	BLOOMFIELD, MARK E.			
Office Action Summary	Examiner	Art Unit			
	Jon Chang	2623			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
1) Responsive to communication(s) filed on 20 O	<u>ctober 2003</u> .				
2a)⊠ This action is FINAL . 2b)☐ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims					
4) Claim(s) 1-41 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-41 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or	vn from consideration.				
Application Papers					
9) The specification is objected to by the Examine 10) The drawing(s) filed on is/are: a) accomplicated any not request that any objection to the Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Examine	epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). sected to. See 37 CFR 1.121(d).			
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the prior application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage			
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:				

Art Unit: 2623

Response to Applicant's Amendment and Arguments

1. The amendment filed October 20, 2003, has been entered and made of record.

The proposed drawing change is approved. In response to the proposed drawing change, the objection to the drawings is withdrawn.

Applicant's arguments have been fully considered, but are not deemed to be persuasive for at least the following reasons.

On pages 4-5 of the response, argues in essence that the "command output means" is of means-plus-function type, and therefore the sixth paragraph of 35 U.S.C. § 112, dictates that the "claim shall be construed to cover the corresponding structure, material or acts described in the specification and equivalents thereof. Applicant asserts that the specification states that the hand-held device scans text, and also develops a command appropriate for text. Applicant further points out that the bottom of page 7 of the specification, shows the example that if the text is a URL, the command would be to launch a browser, and that page 9, lines 21-22 show that if the text is an e-mail address, the command would be an appropriate command, such as a launching an e-mail program. Then, Applicant goes on to characterize what Browning teaches.

The Examiner disagrees. The Examiner makes the following points to illustrate his position.

1) There is some question as to whether the claim limitation "command output means for uploading address information from the device to the terminal and causing the terminal to connect to the addressed resource" actually invokes the sixth paragraph of 35 U.S.C. § 112. The fact that an element is in the "means-plus-function" format, that

Art Unit: 2623

alone is not sufficient, in and of itself, to convert a claim element containing that term into a means for performing a specified function within the meaning of 35 U.S.C. § 112, sixth paragraph (Greenberg v. Ethicon Endo-Surgery, Inc., 91 F.3d 1580, 1583, 39 USPQ2d 1783,1786 (Fed. Cir. 1996)). Further, even when a claim element uses language that falls under the means-plus-function format, if the "means for" is modified by structure, material, or acts for achieving the specified function, then 35 U.S.C. § 112, sixth paragraph is not invoked (for example, see Envirco Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 54 USPQ2d 1449 (Fed. Cir. 2000)). For the instant case, the Examiner contends that the phrase "command output" itself imparts an act or structure which supports the limitation, thereby modifying the "means for" phrase by an act or structure for achieving the specified function. For example, the specified function of the element at issue is "uploading address information from the device to the terminal and causing the terminal to connect to the addressed resource." The phrase "command output" itself is a step or act, i.e., outputting a command, which is in addition to the specified function.

2) Even if the "command output means for..." element did invoke the sixth paragraph of 35 U.S.C. § 112, it must be determined what structure (or material or acts) will perform the **recited** function (see Atmel Corp. v.Information Storage Devices, Inc., 198 F.3d 1374, 1381, 53 USPQ2d 1225, 1230 (Fed. Cir. 1999)). However, Applicant is not addressing the claim's recited function. Rather, Applicant is addressing the function described in the specification. This would amount to reading details of the function, described in the specification, into the claim, which would be improper. Note *In re Van*

Art Unit: 2623

Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

- 3) Further, even if the function of the means-plus-function element at issue were interpreted to cover the function described in the specification, Browning is still considered to disclose it. As Applicant has stated, the specification indicates that the function performed includes launching a browser of the text is a URL. This is taught by Browning (column 1, lines 40-42; column 3, line 41; column 4, lines 60-64; column 5, lines 33-35). Browning also teaches retrieving email (at least at column 3, line 41).
- 4) 35 U.S.C. § 112, sixth paragraph also gives consideration to equivalents of the corresponding structure, material or acts described in the specification, for the claimed means, in a means-plus-function claim. Applicant's specification actually defines what are considered equivalents for the various means of the instant invention. For the "address input means," the specification states that well-known scanner technologies can be used (page 6, lines 26-27). With regard to the "command output means," the specification states that well-known transmitter technologies can be used (page 6, lines 26-27). With regard to the function, the specification indicates that the invention can access "any resource that the terminal can offer either internally or through a communications network." (page 9, lines 25-27, emphasis added). Page 10 indicates that "many variations are possible without departing from the inventive concept." (page 10, line 1). Page 10, lines 14-17, states, "Whilst the invention provides great benefit in the Internet environment, it is not essential that the information resource is an Internet resource; information could be held on an intranet or a database of any description. More generally, as has been mentioned, the invention can be used to acquire and

Art Unit: 2623

identify the unique address of other resources..." (emphasis added) The specification provides a much broader interpretation of the claimed elements than Applicant is arguing. At the very least, Browning covers the internet resource (i.e., a URL or an email address) example provided in the Applicant's specification, and reads on "information...of any description" (column 5, lines 60-61).

On page 6, next to last paragraph, Applicant argues that the specification states that a command code is developed upon scanning and recognizing text, which is not shown by Browning. The Examiner contends that Browning teaches scanning (column 3, line 26) and recognizing text (column 3, lines 38-39). The command is executed (and therefore necessarily developed), that being the launching of a browser (column 4, line 60-64). The command is code since the entire system is controlled by a microprocessor which is programmed with instructions (i.e., code) to carry out the functions (column 3, lines 16-18).

On page 6, last paragraph, Applicant argues that the specification states that the hand-held device can store multiple instances of scanned text (URLs) and only one URL is transmitted at a time, then the associated command causes the stationary terminal to take action such as fetching the web page identified by the URL. However, it is not fully clear that this description corresponds directly and only to the "command output means" limitation. Even so, Browning discloses these limitations (column 4, lines 3-4; column 3, line 41; column 4, lines 41-46, etc.).

On page 8, with regard to claim 2, Applicant requests that the Examiner provide basis in fact and/or technical reasoning. The Examiner contends that he has already

Art Unit: 2623

provided basis for inherency. The Examiner directs Applicant's attention to the paragraph addressing claim 2, on page 3 of the last Office Action.

On page 9, Applicant argues that the "recognition means" is "comprised" of the hand-held control device. The Examiner disagrees. The claim requires that the "hand-held control device" is comprised of the "recognition means." Further, Applicant appears to indicate that Browning's terminal is hand-held (see statement under "Point 1" on page 11).

On page 9, with regard to claim 3, Applicant states that column 4, lines 60-64 discusses a "port" which "interprets" signals. The Examiner disagrees. This part of the patent makes no mention of a "port" or "interpret" signals.

On page 10, with regard to claim 28, Applicant requests that the process of recognizing be identified in Browning. This has been addressed with respect to claim 2 (see page 3 of the last Office Action).

On page 10, with regard to claim 29, Applicant requests "launch code" be identified. In response, this is shown in Browning at column 4, lines 60-64, or in column 5, lines 33-35). The code is that necessary in the microprocessor-based Browning system, to launch the browser.

On page 11, with regard to claim 4, under Point 1, Applicant requests evidence to show the recited appending. The Examiner provides the following evidence: U.S. Patent 6,247,092 to Tanaka et al., at column 1, lines 30-31.

Art Unit: 2623

On page 11, with regard to claim 4, under Point 1, Applicant states that appending will drain Browning's batteries. This is an unsupported allegation and not persuasive.

On page 11, with regard to claim 4, under Point 2, Applicant states that "a teaching for combining" must be shown. The Examiner disagrees. A teaching is only one of three alternatives to establish obviousness. According to *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, **suggestion**, **or motivation** to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, the Examiner has at least provided a motivation for making the combination (see page 7 of the last Office Action).

On page 12, with regard to claims 5 and 31, Applicant requests evidence showing the "recited temporary storage." The Examiner responds by pointing out that the claim does not recite "temporary storage" and the Examiner did not take Official Notice of "temporary storage." In the Tanaka reference cited above, the address is appended to the command data. Thus, once it is uploaded, it is no longer stored. Note also that the receiving side device extracts the address (column 1, lines 33-34). Further, "temporary storage" (not claimed) is taught by U.S. Patent 6,544,295 to Bodnar, at column 23, lines 15-17. This patent is not relied upon in any rejection in this Office Action.

Art Unit: 2623

3 .

On page 12, with regard to claim 17, Applicant argues that the "head end of the scanner defining a surface that is obliquely angled to the longitudinal axis of the barrel" is not a "design choice" because it provides the operating feature that the scanner can be held like a pencil. The Examiner disagrees. First, there is not claimed "operating feature" that the scanner be held like a pencil. Second, these aspects ("head end of the scanner defining a surface that is obliquely angled to the longitudinal axis of the barrel" and "scanner can be held like a pencil") are notoriously well-known in the art. For example, see U.S. Patent 5,574,804 to Olschafskie et al., Figs. 1, 2, 4, 5, and 6. Clearly, the claimed limitation is a substitution of one known element for another.

On page 14, with regard to claim 6, Applicant argues that no teaching has been given in support of the combination, and that the "greater functionality and versatility" is only provided using Browning and Kasabach separately. The Examiner contends that it is combination which provides this advantage since separately, Kasabach could not provide this advantage to Browning. Additionally, Kasabach, at column 5, lines 10-20, provides a motivation for the combination. Allowing the control means to be responsive to the orientation and/or movement of the device as taught by Kasabach, would facilitate determining the position of the writing tip despite movement, and allow compensation for error in position determination. Similar remarks are applicable to Applicant's arguments with respect to claims 8, 9-15, 33 and 34 (page 16).

On page 15, with regard to claim 7, Applicant challenges the Examiner's taking of Official Notice of the tilt switches. The Examiner directs Applicant's attention to U.S.

Art Unit: 2623

Patent 5,548,092 to Shriver, column 4, lines 64-65. Shriver's tilt switch sensor senses tilt, and therefore senses orientation.

With regard to claims 23, 24 and 40-41, the Examiner notes that Applicant acknowledges the rejections.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-3, 16, 18-22, 25-29, 32 and 35-39 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,081,629 to Browning.

As to claim 1, Browning discloses a hand-held control device for controlling a terminal ("terminal" is interpreted in the broad sense. The personal computer or the network computer, column 3, lines 31-32, are considered terminals) connectable by a communications network to an addressed resource (column 2, lines 15-16), the device comprising:

address input means for scanning a text address of the resource (column 2, lines 29-32; column 2, lines 42-45); and

command output means for uploading address information from the device to

Art Unit: 2623

the terminal and causing the terminal to connect to the addressed resource (column 3, lines 26-28; column 3, lines 36-44).

With regard to claim 2, the recognition means for recognizing the nature of the addressed resource from the format of the scanned text address is considered inherent to Browning's device. Note that the device will automatically connect to the address (e.g., Fig.5, elements 52, 56 and 58; column 4, lines 31-37). Note further that the address can pertain to a world wide web page or an e-mail server (column 4, lines 44-50). Therefore the device can at least recognize the nature of the addressed resource (e.g., web or e-mail server). Since it only scans and recognizes text prior to making the connection, it must do this (i.e., recognize the nature of the addressed resource) by the format of the text. As is well known, web and e-mail addresses have particular, but different formats.

As to claim 3, Browning discloses a device according to claim 2, further comprising means for retrieving an application launch code suitable to launch an application on the terminal appropriate to the nature of the addressed resource (column 4, lines 60-64).

Regarding claim 16, Browning discloses a device according to claim 1, further comprising a head end and an elongate barrel terminating distally in the head end to provide a generally pen-like size and shape (Figs. 1A and 1B).

As to claim 18, Browning discloses a device according to claim 1, further comprising means for storing a plurality of resource addresses (column 4, lines 3-4).

Art Unit: 2623

Regarding claim 19, Browning discloses a device according to claim 18, further comprising (i) means for displaying all of the stored resource addresses (column 2, lines 58-60), and (ii) means for selecting an appropriate one of the stored and displayed resource addresses (column 4, lines 29-30).

Referring to claim 20, Browning discloses a device according to claim 1, wherein the command output means uploads information to the terminal by wireless transmission (column 3, lines 29-30).

Regarding claim 21, Browning discloses a device according to claim 20, wherein the command output means includes an IR or RF transmitter (column 3, lines 29-30).

As to claim 22, Browning discloses a device according to claim 1, further comprising display means for providing a confirmatory display of a scanned address (column 2, lines 58-62).

As to claim 25, Browning discloses a system comprising:

a hand-held control device (Figs. 1A and 1B) for controlling a terminal connectable by a communications network to an addressed resource, the device including (i) address input means for scanning a text address of the resource (column 2, lines 29-32; column 2, lines 42-45), and (ii) command output means for uploading address information from the device to the terminal and causing the terminal to connect to the addressed resource (column 3, lines 26-28; column 3, lines 36-44); and

a terminal for downloading address information from the device (colun 3, lines 30-33).

Art Unit: 2623

1

As to claim 26, Browning discloses a system according to claim 25, wherein the terminal includes means for recognizing, verifying and acting upon command data (i.e., via the companion software communications agent, column 3, lines 30-44).

Regarding claims 27-29, the discussions above for claims 1-3 are applicable.

Regarding claim 32, see relevant remarks provided for claim 1.

With regard to claims 35-37, the discussions above for claims 20, 22 and 26 are applicable.

As to claim 38, Browning discloses a method according to claim 37, wherein the addressed resource is an Internet resource and the terminal launches a browser and uses that browser to load the Internet resource (column 4, lines 41-47; column 4, lines 60-64).

As to claim 39, Browning discloses a method according to claim 38, further comprising displaying, viewing and optionally interacting with the Internet resource (column 4, lines 63-64; interacting is considered an inherent use of the browser).

4. Claims 23, 24 and 40-41 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent 6,456,749 to Kasabach et al. (hereinafter "Kasabach").

As to claim 23, Kasabach discloses a hand-held control device for controlling a terminal, the device comprising:

command output means for uploading a text or graphics file from the device to the terminal (column 2, lines 1-3; column 5, lines 35-38; column 8, lines 8-10):

Art Unit: 2623

1

sensor means for sensing movement of the device when the device is used as a writing or drawing instrument (column 4, lines 58-65); and

means for generating the text or graphics file as a user writes or draws with the device (column 5, lines 35-38; column 8, lines 8-10).

Regarding claim 24, Kasabach discloses a device according to claim 23, connectable by a communications network to an addressed resource (column 5, lines 40-51), wherein the command output means includes means for causing the terminal to connect by a communications network to an addressed resource and to convey the text or graphics file as message information to that resource (column 7, lines 1-7).

Regarding claims 40 and 41, see the remarks provided above for claims 23 and 24.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Browning.

With regard to claim 17, Browning discloses device according to claim 16, wherein the address input means includes a scanner (column 2, lines 41-42), but does

Art Unit: 2623

not discloses that the head end defines a surface that is obliquely angled to the longitudinal axis of the barrel such that the surface including the scanner. Browning's surface appears to be approximately parallel to the longitudinal axis. However, to have the surface at any particular orientation to the longitudinal axis is seen as a decision based upon designer preference. The designer would utilize a particular orientation based on a particular need or application, or perhaps based upon consumer desires.

7. Claims 4-5 and 30-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Browning and U.S. Patent 6,247,092 to Tanaka et al. (hereinafter "Tanaka").

Note: Tanaka has been relied upon in response to Applicant's traversal of the taking of Official Notice in the previous Office Action, as per MPEP 2144.03.

Regarding claim 4, Browning does not disclose that the device further includes means for appending the application launch code to the address information before upload to the terminal. However, Tanaka teaches that appending application launch code to address information is well known in the art (column 1, lines 30-31). It would have been obvious to do this in Browning's system, as taught by Tanaka, because, the particular program to be launched is associated with the address information, and appending would allow more efficient launching of the application. Further, it would have been obvious to append this before upload to the terminal to alleviate processing by the terminal.

Art Unit: 2623

Regarding claim 5, Browning also does not disclose means for storing the address information with an associated application launch code until upload to the terminal. In the Tanaka reference cited above, the address is appended to the command data. Thus, once it is uploaded, it is no longer stored. Note also that the receiving side device extracts the address (column 1, lines 33-34).

With regard to claims 30-31, see the discussion provided above for claims 4 and 5.

8. Claims 6, 8-15 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Browning and Kasabach.

Regarding claim 6, Browning does not disclose that the device further comprises control means responsive to the orientation and/or movement of the device. However, Kasabach teaches a hand-held control device, which comprises such control means (column 4, line 58 to column 5, line 1). Implementing Kasabach device's writing capabilities and features in Browning's device would have added greater functionality and versatility to Browning's device. Note that Kasabach's device is also for the purpose of connecting to the Internet as well as send and receive e-mail (column 5, lines 48-51), the same purpose as Browning's device. Therefore, it would have been obvious to one of ordinary skill in the art to modify Browning's device to include Kasabach's teachings.

Art Unit: 2623

Regarding claim 8, Kasaback further discloses that the control means includes an accelerometer or an array of accelerometers arranged to sense orientation or movement of the device (column 4, line 66 to column 5, line 1).

Regarding claim 9, in modifying Browning's device according to Kasabach (see discussion for claim 6), the control means would be arranged to sense movement of a head end of the device (via accelerometers) when the device is used as a writing instrument (note Kasabach contemplates use of the device as a writing instrument, column 2, lines 1-2; column 3, line 1).

As to claim 10, Kasabach further discloses that the control means activates a function in accordance with the orientation or movement of the device (column 6, lines 66-67).

As to claim 11, Kasabach further discloses that the control means activates a function in accordance with a predetermined sequence of orientations or movements of the device (column 7, lines 1-13).

As to claim 12, Kasabach further discloses that the head end of the device includes a stylus (column 3, lines 1-4).

As to claim 13, Kasabach's stylus includes a mechanical pencil (column 3, lines 3-4), the "lead" of which is inherently retractable.

As to claim 14, Kasabach further discloses means for generating a text file as a user writes with the device (column 8, lines 8-10).

Art Unit: 2623

As to claim 15, Kasabach discloses means for generating a graphics file as a user writes or draws with the device (column 5, lines 35-38; the file is considered inherent when storing).

With regard to claim 33, see the discussion above for claim 6.

With regard to claim 34, remarks similar to those provided above for claims 9 and 14 are applicable.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Browning, Kasabach and U.S. Patent 5,548,092 to Shriver.

Note: Shriver has been relied upon in response to Applicant's traversal of the taking of Official Notice in the previous Office Action, as per MPEP 2144.03.

As to claim 7, Kasabach does not explicitly mention that the control means includes a tilt switch or an array of tilt switches arranged to sense orientation of the device. Tilt switches for sensing orientation are exceedingly old and well known in the art as evidenced by Shriver (column 4, lines 64-65). Shriver's tilt switch sensor senses tilt, and therefore senses orientation. This would provide a simple way for determining orientation. Therefore it would have been obvious to one of ordinary skill in the art to modify the Browning-Kasabach device to utilize tilt switches.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2623

Page 18

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jon Chang whose telephone number is (703)305-8439. The examiner can normally be reached on M-F 8:00 a.m.-6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on (703)308-6604. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jon Chang *C* Primary Examiner

Art Unit 2623

Jon Chang February 9, 2004